

A. CLASSIFICATION OF SUBJECT MATTER		
IPC 7	D21H13/40	D21H13/38
D21H19/72		

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7	D21H
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 497 787 B1 (GEEL PAUL ADRIAAN) 24 December 2002 (2002-12-24) cited in the application examples	1,2,4,18
A	US 2003/099833 A1 (ERB DAVID F ET AL) 29 May 2003 (2003-05-29) claim 29	1,18

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*Z\* document member of the same patent family

Date of the actual completion of the International search

30 September 2005

Date of mailing of the International search report

12/10/2005

Name and mailing address of the ISA  
European Patent Office, P.B. 5618 Patentlaan 2  
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Authorized officer

Songy, 0

Patent document cited in search report	Publication date		Patent family member(s)	Publication date
US 6497787	B1	24-12-2002	AT 269918 T AU 6220301 A DE 60103999 D1 DE 60103999 T2 WO 0179600 A2 EP 1276934 A2 US 2003000663 A1	15-07-2004 30-10-2001 29-07-2004 21-07-2005 25-10-2001 22-01-2003 02-01-2003
US 2003099833	A1	29-05-2003	NONE	

PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY  
(PCT Rule 43bis.1)

Applicant's or agent's file reference  
see form PCT/ISA/220

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

FOR FURTHER ACTION  
See paragraph 2 below

International application No.  
PCT/US2005/018012

International filing date (day/month/year)  
24.05.2005

Priority date (day/month/year)  
18.06.2004

International Patent Classification (IPC) or both national classification and IPC  
D21H13/40, D21H13/88, D21H19/22

Applicant  
OWENS CORNING

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and Industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or Industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the International application

2. FURTHER ACTION

If a demand for International preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**Box No. I Basis of the opinion**

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1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - a sequence listing
    - table(s) related to the sequence listing
  - b. format of material:
    - in written format
    - in computer readable form
  - c. time of filing/furnishing:
    - contained in the international application as filed.
    - filed together with the international application in computer readable form.
    - furnished subsequently to this Authority for the purposes of search.
3.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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**Box No. II Priority**

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- The validity of the priority claim has not been considered because the International Searching Authority does not have in its possession a copy of the earlier application whose priority has been claimed or, where required, a translation of that earlier application. This opinion has nevertheless been established on the assumption that the relevant date (Rules 43bis.1 and 64.1) is the claimed priority date.
- This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
PCT/US2005/018012

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**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or  
Industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	3 5-17 19-22
	No: Claims	1 2 4 18
Inventive step (IS)	Yes: Claims	3 5-17 19-22
	No: Claims	1 2 4 18
Industrial applicability (IA)	Yes: Claims	1-22
	No: Claims	

2. Citations and explanations

see separate sheet

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**Box No. VII Certain defects in the international application**

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The following defects in the form or contents of the international application have been noted:

see separate sheet

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**Box No. VIII Certain observations on the international application**

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The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

**Re Item V**

**Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

The following document is mentioned for the first time in this written opinion; the numbering will be adhered to in the rest of the procedure :

D1: US-B1-6 497 787 (GEEL PAUL ADRIAAN) 24 December 2002 (2002-12-24)

**Novelty :**

**Independent claims 1 and 18**

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of independent claim 1 is not new in the sense of Article 3(2) PCT.

Document D1 discloses (see examples) an impregnated nonwoven fibrous veil containing a pre-binder and reinforcing fibres which can be glass fibres or ceramic fibres, said veil being impregnated with a composition containing 30% of a binder and 70% of expandable microspheres. Said microspheres are fillers. The subject-matter of independent claim 1 is therefore not new (Article 33(2) PCT).

The same reasoning applies, mutatis mutandis, to the subject-matter of independent claim 18, which therefore is also considered not new.

**Dependent claims 2 and 4**

The product which is the subject-matter of claim 1 is the same as the one disclosed in D1. Therefore, it has the same properties in terms of porosity and compressibility, even if the values of said parameters are not mentioned in D1. Hence the subject-matter of dependent claims 2 and 4 is not new (Article 33(2) PCT).

**Inventive step :**

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/US2005/018012

The subject-matter of claims 1, 2, 4 and 18 being not new does not meet the requirements of Article 33(3) PCT regarding inventive step.

**Industrial applicability :**

The subject-matter of claims 1-22 is considered to meet the requirements of Article 33(4) PCT.

**Re Item VII**

**Certain defects in the international application**

The independent claims have not been cast in the two-part form, with those features which in combination are part of the prior art (see document D1) being placed in the preamble. Hence, the requirements of Rule 6.3(b) PCT are not met.

**Re Item VIII**

**Certain observations on the international application**

- 1) The use of "about" throughout the claims is unclear and renders it impossible to properly determine the subject matter for which the protection is sought. Thus the clarity requirements of Article 6 PCT are not met.
- 2 ) There are various ways of measuring the air porosity of a fibrous veil, said various ways leading to results which are not comparable. Therefore the subject-matter of claim 2 is not clear (Article 6 PCT).